



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,279	12/05/2005	Markku Jarvinen	1497-131	4615
23117	7590	08/09/2007		
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER NGUYEN, MAI T	
			ART UNIT 3671	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/555,279	Applicant(s) JARVINEN ET AL.	
	Examiner Mai T. Nguyen	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/30/06, 2/23/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided, see Abstract, lines 3, 4, 6, 8 and 9. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The invention comprises," etc, as seen in line 1.

2. The disclosure is objected to because of the following informalities: the blades of the gripping members being coarsely serrated, as required by claim 9, are not disclosed.

Appropriate correction is required.

Claim Objections

3. Claims 1 and 13 are objected to because of the following informalities: "the apparatus" lacks antecedent basis since "an apparatus" was not previously set forth, see claim 1, line 5 and claim 13, line 7. Appropriate correction is required.

Art Unit: 3671

4. Claim 10 is objected to because of the following informality: “two blades” should be –two gripping means—in line 2 as set forth in claim 1. Appropriate correction is required.

5. Claim 13 is objected to because of the following informalities: “the lifting means” lacks antecedent basis since a lifting means was not previously set forth, see line 2. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the blades “arranged to penetrate into and/or under the stump” in line 7. It is unclear whether the blades penetrate into the stump and under the stump; into the stump only; or under the stump only.

Claim 5 recites, “the power means are attached to the frame and/or the gripping means or the cutting blade” in lines 2-4. It is unclear to exactly what the power means are attached.

Claim 8 recites the blades are “formed in such a way as to split the stump” which fails to provide further limitations to the blade structure, see lines 2-3. Since “such a

way” could mean any embodiment that would split the stump, the claim is considered indefinite.

Claim 9 recites the blades are “coarsely serrated on their cutting side,” see line 2. However “their cutting side” lacks antecedent basis is therefore indefinite since it was not set forth which side of the blades is considered the cutting side.

NOTE: Claims 1 and 5 will be examined as though the blades could be in any of the arrangements. Claims 8 and 9 will be examined as best understood from the disclosure.

Claim 13 recites “a method for grubbing stumps” but does not clearly set forth the steps. Applicant is reminded that in order to claim a method, the steps must be set forth in gerund form.

Claim 17 recites the gripping means “incorporate cutting blades (48)” but is considered unclear since cutting blades (48) was not previously set forth. Which blade is being referred to? The cutting blade (18, 58) or the spikes or blades that are part of the gripping means?

NOTE: Claim 13 will be examined as best understood regarding what is considered a step. Claim 17 will be examined as the gripping means incorporating the spikes or blades as set forth in claim 13.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (US 5,441,090) and Nicholson (US 4,517,755).

Regarding claim 1, Hill discloses a tree gripping apparatus in figures 2-6 capable of stump grubbing comprising a frame 134, 136; coupling means 70, 72; a work machine 4; two gripping means 144 oppositely arranged, having multiple blades 150, capable of penetrating under a stump, whereby the distance between blades appears to be no less than 400 mm; a cutting blade 160 arranged to cut downwards; and power means 152, 170 to move the gripping means and the cutting blade relative to each other in a vertical direction. Hill fails to disclose 5 to 20 blades. However, the number of blades of the gripping member is considered an obvious design choice which would allow better grip with an increasing number of blades. Nicholson discloses an apparatus for clearing undergrowth and timber having a gripping means with 6 blades 11, 22, see figure 2. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus of Hill with multiple blades as taught by Nicholson to better grip a tree stump thereby allowing secure removal.

Regarding claim 2, Hill discloses the cutting blade 160 is immovable vertically relative to the frame when cylinder 170 is not actuated, see figure 5.

Regarding claim 3, Hill discloses the gripping means 144 is immovable vertically relative to the frame due to pivot member 142, see figure 2.

Regarding claim 4, Hill discloses the cutting blade comprises a blade 164 mainly in cylindrical form, see figure 5.

Regarding claim 5, Hill discloses the power means 152, 170 move in a direction other than the direction of the force generated by the power means relative to the frame via brackets 154, 156, see figure 2.

Regarding claim 6, Hill discloses pivoting means 142 to pivot the gripping means between an open and closed position, see figure 2.

Regarding claim 7, Hill discloses pins, considered hinge members, included in pivoting means 142 and power members 152 to pivot the gripping means, see figure 2.

Regarding claim 8, Hill discloses the blades 150 are formed in such a way to be capable of slitting the stump, see figure 2.

Regarding claim 9, the Hill discloses the tree gripping apparatus having blades 150 coarsely serrated on their cutting side similarly as disclosed by Applicant, see figure 2.

Regarding claim 10, Hill discloses the two gripping means are arranged on opposite sides of the apparatus to pivot around parallel axes symmetrically so that the blades are aligned in the closed position, see figure 2.

Regarding claim 11, the combination of Hill and Nicholson disclose the two gripping means wherein one of the gripping means comprises four blades. The combination of Hill and Nicholson fails to disclose both gripping having no less than three blades. However it is obvious from Nicholson to provide at least three blades on any side of the gripping means for better gripping stability, see figure 2. Therefore it

would have been obvious to one of ordinary skill in the art at the time of the invention to provide both gripping means of the combination of Hill and Nicholson with at least three blades to provide better gripping stability thereby allowing tree stump secure removal.

Regarding claim 12, the combination of Hill and Nicholson discloses the blades of one gripping means are arranged along a distance appearing no less than 600 mm, see figure 2 of both Hill and Nicholson.

10. Claims 13-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hultdin et al. (US 3,851,686) in view of Hill and Nicholson.

Regarding claim 13, Hultdin discloses a method for removing trees including the stump with an apparatus having gripping means 14, 15 and a cutting blade 7, 8, 9 supported on a frame 1, in which the method comprises the apparatus is positioned around a tree, thereby above the stump; the two gripping means pivoted around parallel pivot axes 17; blades of the gripping means gripping underneath the stump; the cutting blade positioned beside the stump vertically; and the stump lifted upwards and the roots severed by moving the cutting blade downwards relative to the gripping means, see column 4, lines 34-52. Hultdin fails to disclose 5 to 20 blades of the gripping means and a lifting means and thereby positioning the apparatus using the lifting means.

Hill teaches a tree cutting and manipulating grapple having boom 2 as a lifting means for positioning the grapple 64 as best seen in figure 1. Nicholson teaches an apparatus for clearing undergrowth and timber having a gripping means with 6 blades 11, 22, see figure 2. Therefore it would have been obvious to one of ordinary skill in the

Art Unit: 3671

art at the time of the invention to provide the method of Hultdin with a step for positioning the apparatus using the lifting means as taught by Hill and gripping the stump at six points as taught by Nicholson because it is well known to position an apparatus using a boom and multiple gripping points for easy manipulation and better gripping stability in stump removal.

Regarding claim 14, the method of the combination of Hultdin, Hill and Nicholson discloses the cutting blade is immovable in the vertical direction when cylinders 12, 13 are not actuated, see Hultdin's figure and column 3, lines 3-12.

Regarding claim 15, the method of the combination of Hultdin, Hill and Nicholson discloses the gripping means is immovable in the vertical direction by pin 17, see Hultdin's figure and column 3, paragraph 2.

Regarding claim 16, the method of the combination of Hultdin, Hill and Nicholson discloses the stump is supported against the apparatus by cutting blades 7, 8, 9 and gripping means 14, 15 and from above by frame 1, see Hultdin's figure and column 4, lines 34-52.

Regarding claim 17, the method of the combination of Hultdin, Hill and Nicholson disclose the gripping means to remove the stump but fails to disclose pressing the gripping means deep into the stump. Pallari teaches a stump pulling and crushing device having a blade 3 and arms 2 wherein the device presses the blade against the stump so that the stump is split, see column 1, lines 40-46. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of the combination of Hultdin, Hill and Nicholson with the step of pressing the

Art Unit: 3671

blades of the gripping means deep into the stump to split it as taught by Pallari to rapidly and efficiently pull and crush stumps for use as raw material, see Pallari, column 1, paragraph 1.

Regarding claim 18, the method of the combination of Hultdin, Hill and Nicholson discloses using the apparatus's power means 12, 13, 18, 19 to release the stump and sever the roots, see Hultdin's figure and column 4, lines 34-52.

Regarding claim 20, Hultdin discloses a method capable of prevention of fungus disease, characterized in that in this method, a stump and the roots surrounding the stump for a distance around the stump are removed from the ground, wherein an incision by blades 7, 8, 9 at least for the most part around the stump and directed vertically downwards into the ground, as seen in the figure, to a certain depth and the stump is lifted vertically upwards by gripping means 14, 15 at four points, see column 4, lines 34-52.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mai T. Nguyen whose telephone number is (571) 272-7662. The examiner can normally be reached on Monday-Friday 8:00a-5:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on (571) 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thomas B. Will
Supervisory Patent Examiner
Group 3600